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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,878	09/19/2003	Evan E. Koslow	KT-P-026US	8886

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EXAMINER	
FORTUNA, JOSE A	

ART UNIT	PAPER NUMBER
1731	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,878	KOSLOW, EVAN E.	
	Examiner	Art Unit	
	José A. Fortuna	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) *26-40* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/27/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on April 14, 2005 is acknowledged.

2. Claims 26-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 14, 2005.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, **"The disclosure concerns,"** **"The disclosure defined by this invention,"** **"The disclosure describes,"** etc.

Claim Objections

4. Claims 1-8 are objected to because of the following informalities: in claim 1 the Markush group is improper, i.e., it should include the phrase "selected from the group" before the word "comprising." Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-8, 11-13 and 20-25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over by US Patent Nos. 4,904,343, ('343), 4,565,727, ('727) to Giglia et al., or 4,929,502, ('502) or EP 145849 A1, ('849) to Giglia, Hereafter referred as "Giglia."

Giglia teaches an integrated paper comprising fibrillated fibers and a particle immobilized therein, see abstract. Giglia teaches that the paper can be formed using the wet lay technique, resulting in a novel absorbent fabric, having a caliper between of at least 0.005 inch, high absorptive capacity to weigh ratio and high porosity to fluid flow, column 3, lines 19-25 of the '727 patent; column 3, lines 20-26 of the '343; column 6, lines 38-44 of the '502 and page 4, lines 1-14, of the '849 patent. Giglia also teaches that the paper can be used to make filters or combined with another filter surface, e.g., a carbon block, column 4, lines 2-11 of the '727 patent; column 4, lines 3-11 of the '343; column 7, lines 14-22 of the '502 and page 4, third paragraph, of the '849 patent. Giglia teaches the same type of fibers as claimed and the same particles including the size of such particles, column 2, lines 53-57 of the '727 patent; column 2, lines 54-58 of the '343; column 6, lines 33-37 of the '502 and page 3, third paragraph, of the '849 patent. Giglia teaches the use of particles either to adsorb toxic gases or as microorganisms control and teaches the use of activated carbon particles as the preferred particles.

Even though Giglia does not teach the pore size of the paper as claimed, this property seems to be inherent to the paper taught by the reference, since they are made using the same process and using the same raw materials as claimed, or at least the minor modification to obtain the pore size in the range as claimed would have been obvious to one of ordinary skill in the art

as an optimization of a result effective variable. Note that it has been held that "[T]he discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art. *In re Antoine*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); *In re Aller*, 42 CCPA 824, 220 F.2d 454, 105 USPQ 233 (1995).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-3 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Nos. 4,904,343, ('343), 4,565,727, ('727) to Giglia et al., or 4,929,502, ('502) or EP 145849 A1, ('849) to Giglia, Hereafter referred as "Giglia," in view of "Complete Textile Glossary" by Celanese Acetate LLC[1].

Giglia's invention has been discussed above. Giglia fails to teach the use of lyocells as the synthetic fibers used to make the paper(s). However, the Celanese publication above teaches the benefits of using lyocells for making porous webs, e.g., Lyocell fiber is suitable for blending with cotton or other manufactured fibers. Because of its molecular structure, lyocell has the tendency to develop surface fibrils that can be beneficial in the manufacture of hydroentabled and other nonwovens, and in specialty papers. For apparel uses, the fiber's unique fibrillation characteristic has enabled the development of fabrics with a soft luxurious hand. The degree of fibrillation is controlled by cellulose enzyme treatment. Therefore, the use of such fibers, lyocell fibers, to substitute the synthetic fibers, specifically the acrylic fibers taught by Giglia, would have been obvious to one of ordinary skill in the art in order to obtain the benefits indicated above. Note that one of ordinary skill in the art would certainly recognize the easiness of the fibrillation of the lyocells fibers and the environmental friendliness of the lyocells fibers as oppose the synthetic fabrics suggested by Giglia. Moreover, it has been held that "[W]here two equivalents are interchangeable for their desired function, substitution would have been obvious and thus, express suggestion of desirability of the substitution of one for the other is

unnecessary." In re Fout 675 F. 2d 297, 213 USPQ 532 (CCPA 1982); In re Siebentritt, 372 F.2d 566, 152 USPQ 618 (CCPA 1967).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of " Paper containing Fibrillated Fibers."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A. Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

José A Fortuna
Primary Examiner
Art Unit 1731

JAF

[1] Only the pertinent page has been attached. However, the entire reference in PDF format can be downloaded from:

http://www.vectranfiber.com/fiberdictionary.pdf.